

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A stator of an induction motor, ~~the induction motor~~ comprising:

a stator body having ~~provided with a main winding coil and an auxiliary winding coil~~ at a plurality of slots formed therein ~~at a body of the stator~~;

~~an induction rotor rotatably inserted into the stator; and~~

~~a magnet rotor rotatably inserted between the stator and the induction rotor;~~

a plurality of coil spans located between the slots;

at least one main winding coil; and

at least one auxiliary winding coil;

wherein two adjoining coil spans, ~~intervals between the slots~~, are different from each other, and wherein the main winding coil and the auxiliary winding coil are alternately positioned within one of the two adjoining coil spans and the other of the two adjoining coil spans, respectively.

2. (Cancelled)

3. (Currently Amended) The ~~induction motor~~ stator of claim 1, wherein two ~~adjacent~~ adjoining coil spans in one direction are called as a pair of coil spans, the pairs of coil spans are formed as the same shape and the same size, and two coil spans constituting the pair of coil spans are different each other.

4. (Currently Amended) The ~~induction motor~~ stator of claim 3, wherein a ratio between said two coil spans constituting the pair of coil spans is preferably 1.5:1.

5. (Currently Amended) The ~~induction motor~~ stator of claim 3, wherein a ratio between ~~said~~ the two coil spans constituting the pair of coil spans is ~~preferably~~ or 2.75:1.

6. (Currently Amended) ~~A stator of an induction motor, the~~ An induction motor comprising:

a stator body having ~~provided with a main winding coil and an auxiliary winding coil at a plurality of slots formed~~ therein ~~at a body of the stator;~~

a plurality of coil spans located between the slots;

at least one main winding coil; and

at least one auxiliary winding coil;

an induction rotor rotatably inserted into the stator; ~~and~~

a magnet rotor rotatably inserted between the stator and the induction rotor; and

a plurality of teeth formed between the slots, each of the plurality of teeth having a main body and an end, wherein the end widths of two adjacent teeth formed between the slots are being different from each other, the main winding

coil and the auxiliary winding coil being alternately positioned on one of the two adjacent teeth and the other of the two adjacent teeth, respectively.

7. (Currently Amended) The induction motor ~~stator~~ of claim 6, wherein the slots have the same size and the same shape, and lengths and widths of the teeth formed between the slots are the same.

8. (Currently Amended) The induction motor ~~stator~~ of claim 6, wherein two adjacent ~~end widths of the teeth in one direction are different, said two different teeth are called as a pair of teeth, and each of the pairs of teeth adjacent to the pair of teeth have~~ has the same shape and the same size.

9. (Currently Amended) The induction motor ~~stator~~ of claim 8, wherein a ratio between the end widths of two teeth constituting the pair of teeth is preferably 1.5:1.

10. (Currently Amended) The induction motor ~~stator of claim 3~~ of claim 8, wherein a ratio between the end widths of two teeth constituting the pair of teeth is ~~preferably or~~ 2.75:1.

11. (Cancelled)

12. (New) The stator of claim 1, wherein the main winding coil is wound on a tooth positioned within a wider coil span of the two adjoining coil spans, and the auxiliary winding coil is wound on a tooth positioned within a narrower coil span of the two adjoining coil spans.

13. (New) The stator of claim 12, wherein the main winding coil completely encircles the tooth positioned within the wider coil span of the two adjoining coil spans, and the auxiliary winding coil completely encircles the tooth positioned within the narrower coil span of the two adjoining coil spans.

14. (New) The induction motor of claim 6, wherein two adjoining coil spans are different from each other, the main winding coil and the auxiliary winding coil are alternately positioned within one of the two adjoining coil spans and the other of the two adjoining coil spans, respectively.

15. (New) The induction motor of claim 14, wherein the main winding coil is wound on the tooth positioned within a wider coil span of the two adjoining coil spans, and the auxiliary winding coil is wound on the tooth positioned within a narrower coil span of the two adjoining coil spans.

16. (New) The induction motor of claim 15, wherein the main winding coil completely encircles the tooth positioned within the wider coil span of the two

adjoining coil spans, and the auxiliary winding coil completely encircles the tooth positioned within the narrower coil span of the two adjoining coil spans.

17. (New) The induction motor of claim 6, wherein the auxiliary winding coil is for starting the magnet rotor and the main winding coil is for driving the magnet rotor after the magnet rotor is started.

18. (New) A induction motor comprising:
a stator provided with a main winding coil and an auxiliary winding coil at a plurality of slots formed at a body of the stator;
an induction rotor rotatably inserted into the stator; and
a magnet rotor rotatably inserted between the stator and the induction rotor, wherein two adjoining coil spans are different from each other, and a ratio between the two adjoining coil spans is 2.75:1.

19. (New) A induction motor comprising:
a stator provided with a main winding coil and an auxiliary winding coil at a plurality of slots formed at a body of the stator;
an induction rotor rotatably inserted into the stator;
a magnet rotor rotatably inserted between the stator and the induction rotor;
and

a plurality of teeth formed between the slots, end widths of two adjacent teeth being different from each other, a ratio between the end widths of two adjoining teeth being 2.75:1.